



# Dry Culture Growth Media for Microorganisms

(detailed information and prices on request)



## Bacteriological Agar

IBI's Bacteriological Agar is used as a solidification agent in the preparation of microbiological culture media. Granulated agar is a water soluble colloidal extract from certain species of marine red algae; including *Gelidium*, *Pterocladia*, and *Gracilaria*. The majority of microorganisms cannot digest agar, thus making it an excellent solidifying agent.

## Blood Agar Base #2

IBI's Blood Agar Base #2 is recommended for the cultivation of a wide variety of microorganisms. When prepared with 5 - 10 % blood, the media can be used to cultivate fastidious microorganisms and study hemolytic reactions.

## LB Agar Lennox

IBI's LB Agar Lennox is used in molecular genetic studies. It is a nutritionally rich media for the growth and maintenance of pure cultures of recombinant strain of *E. coli*. The inclusion of casein peptone and yeast extract supplies essential growth factors to the *E. coli* bacterial culture; such as nitrogen, carbon, sulfur, minerals, and vitamins. Sodium chloride provides essential electrolytes. Agar is used as a solidification agent.

## LB Lennox Broth

IBI's LB Lennox Broth is used in molecular genetic studies. It is a nutritionally rich media for the growth and maintenance of pure cultures of recombinant strains of *E. coli*. The inclusion of casein peptone and yeast extract supplies essential growth factors to the *E. coli* bacterial culture; such as nitrogen, carbon, sulfur, minerals, and vitamins. Sodium chloride provides essential electrolytes.

## LB Miller Broth

IBI's Luria Broth (LB Miller) is used in molecular genetic studies, as well as maintaining and propagating *E. coli* in molecular and microbiology procedures. The inclusion of casein peptone and yeast extract provides essential growth factors for the bacteria; such as nitrogen, sulfur, minerals, and vitamins. Sodium chloride provides essential electrolytes.

## Miller LB Agar

IBI's Miller LB Agar is used in molecular genetic studies, as well as maintaining and propagating *E. coli* in molecular and microbiology procedures. The inclusion of casein peptone and yeast extract provides essential growth factors for the bacteria; such as nitrogen, sulfur, minerals, and vitamins. Sodium chloride provides essential electrolytes. Agar is used as a solidification agent.

### **Potatoe Dextrose Agar**

IBI's Potatoe Dextrose Agar is used for the isolation, identification, and cultivation of fungi. It is also used in the cultivation and isolation of yeasts and molds from dairy and food products. Lowering the pH to  $3.5 \pm 0.1$  inhibits bacterial growth and aids in the isolation of fungi.

### **Terrific Broth**

IBI's Terrific Broth is used with Glycerol in cultivating recombinant strains of *E. coli*. Terrific Broth is a highly enriched medium for improving yield in plasmid bearing *E. coli*. Recombinant strains have an extended growth phase in the medium. The addition of tryptone and yeast extract in the medium will allow higher plasmid yield per volume. Glycerol is used as a carbohydrate source in this formulation. Unlike glucose, glycerol is not fermented to acetic acid.

### **Todd-Hewitt Broth**

IBI's Todd-Hewitt Broth is intended for the cultivation and serological typing of Group A hemolytic streptococci. Todd-Hewitt Broth is formulated according to Updyke and Nickels modification of the medium originally described by Todd-Hewitt. Todd-Hewitt broth is composed of beef heart infusion, yeast extract, and casein, which are excellent nutritional components. The formation of protease is prevented which allows the production of type specific M protein. Dextrose is a source of carbon and energy and is fermented by the streptococci. The acid by-products of the fermentation are neutralized by the presence of sodium carbonate and sodium phosphate.

### **Trypto Soy Agar**

IBI's Trypto Soy Agar is a general growth medium prepared with or without blood or other enrichments. It is used for the isolation of different strains of fastidious microorganisms.

### **Tryptone**

IBI's Tryptone is a pancreatic digest of casein and used as a nitrogen source in culture media. It is capable of supporting growth of fastidious and non-fastidious microorganisms. Non-detectable concentrations of carbohydrates allows its use in differentiating bacteria on the basis of their ability to ferment various carbohydrates. It can be used for indole production because of its high tryptophane concentration. It is also recommended as a casein peptone in media used for detecting bacteria in dairy products, drinking and/or waste water, and in antibiotic test media.

### **Tryptose Phosphate Broth**

IBI's Tryptose Phosphate Broth is a medium recommended for the cultivation of fastidious microorganisms. Tryptose Phosphate Broth is a buffered broth which can support the growth of fastidious streptococci and meningococci. The addition of 0.1% agar concentration can aid in the recovery of obligate anaerobes. Tryptose peptone and dextrose are a source of carbon, organic nitrogen, and energy. Sodium chloride contributes to osmotic equilibrium and disodium phosphate is a buffering agent.

### **Yeast Extract**

IBI's Yeast Extract is used in preparing microbiological culture media. Yeast extract is the water soluble portion of autolyzed yeast. The autolysis is carefully controlled to preserve the naturally occurring B-complex vitamins. It is an excellent stimulator of bacterial growth and is used in culture media in place of, or in addition to, beef extract.